VDAB Alerts and Notifications Guide

This guide illustrates how to add alerts to monitoring flows and to create flows to handle alerts using the Alert Stream Input node. It uses the simplest examples Please also see the related tutorial and sample flows for more complex examples of alerts and alert handling.

Before This	You should have reviewed the VDAB introductory tutorial and documentation to understand how to create basic flows.

Related Documentation

The following document and tutorials either are a) available or b) being developed to further support this subject. Those available are highlighted in blue while those under development are not highlighted.

Related Guides	Details
Alert Intervention Guide	Details how automated and manual interventions can be connection with events received from the *AlertStreamInput* node
Watershed Guide	Describes how to build a watershed which supports propagating and handling alerts in downstream systems

Related Tutorial	Details
Monitoring And Alerts https://vdabtec.com/vdab/tutorials	Tutorial video which demonstrates how to monitor and create alerts. This includes some more complicated examples of alerts and alert handling.

Declaring Alerts

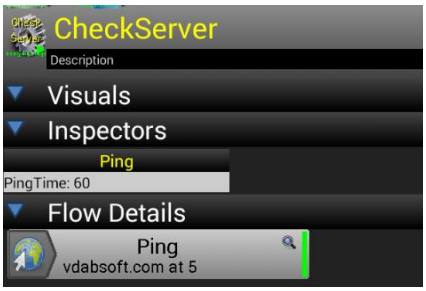
Alerts are a special type of event that can be created using the *AlertTarget* node. This is usually in response to some kind of condition that will require a follow up action. While you can include the follow up action directly within the flow that discovers the condition, declaring alerts allows the handling to be placed in a separate flow or separate flows so that the same kind of handling can be standardized and reused.

The following steps would declare an alert when a website is not accessible.

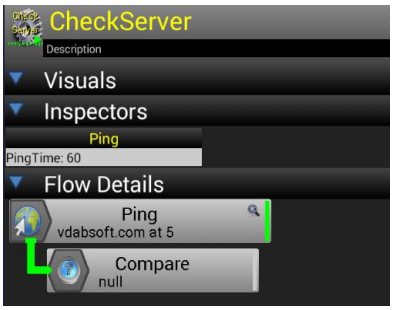
Create a flow with a condition that is checked

The value of any event can be checked to determine if it needs to alert. Create a flow and add the compare node to check its value.

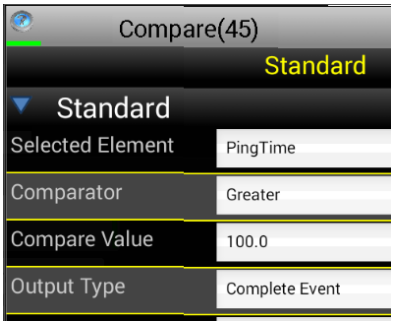
1. Create flow that creates an event that you want to check. In this case the *PingSource* node is used to checks the ability to access a specific server.



2. Add a condition to the flow generating the event by clicking add node and selecting the *Compare* node. (See Appendix)



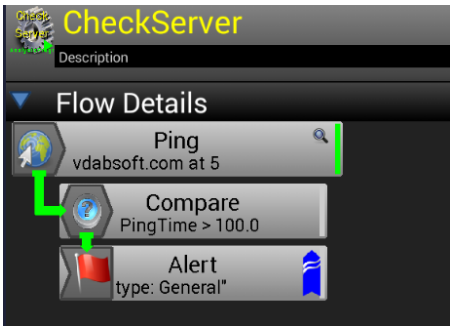
3. Edit the condition to check appropriate data element, comparison and value. In this case when the PingTime exceeds 100 msecs, the compare will send the event to the next flow.



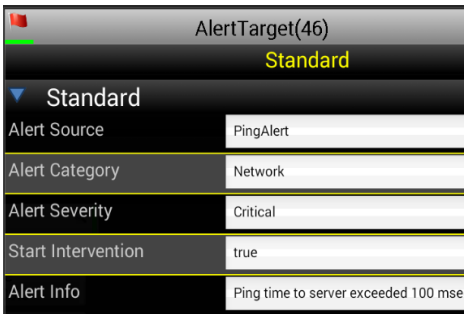
Add an Alert to the Condition

Add and configure an alert to the condition. Configure the alert.

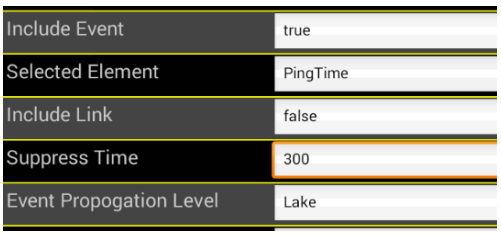
1. Select the Add Node option after clicking on the *Compare* node. Select the *AlertTarget* node to add it to the *Compare* node.



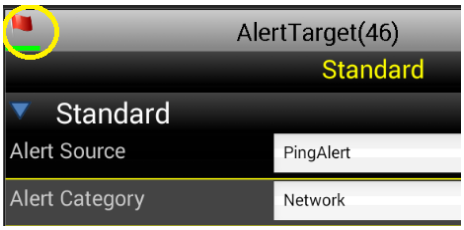
2. Click on the *AlertTarget*, select Edit and configure the basic target attributes include category, severity and the information message. (See Appendix for node attribute details.)



3. Continue to edit the advanced features of the *AlertTarget* including ***include event*** and the repeat ***suppression time***. (See Appendix for node attribute details.)



4. Save the edits to flow by clicking in the upper left hand corner of the edit popup.



5. Save and Run the flow. If the conditions are met an alert should appear on the container screen.

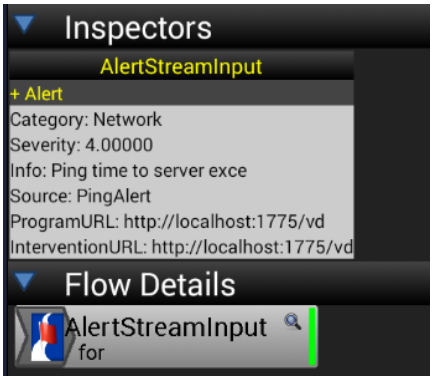
Handling Alerts

VDAB allows the creation of flows that specifically handle individual or multiple alerts. While these alert handling flows can do most anything including an automated intervention, this document describes the simple case of sending an Email.

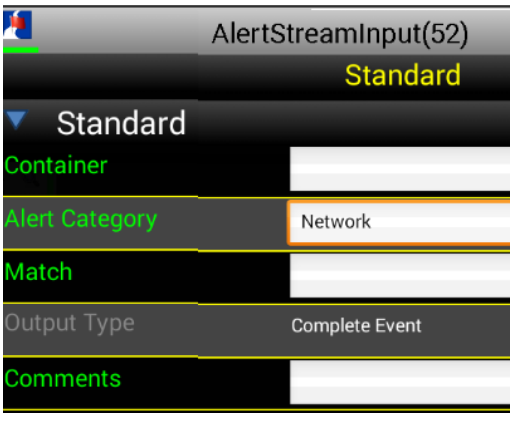
Create a flow for alert handling

1. Create a flow and add an *AlertStreamInput* node to the flow.

2. Alert events will be pushed out of this node as can be illustrated by adding an inspector



3. The *AlertStreamInput* can be configured to pass alerts of a particular category or a match for alert information. (See the Appendix for node attribute details.)

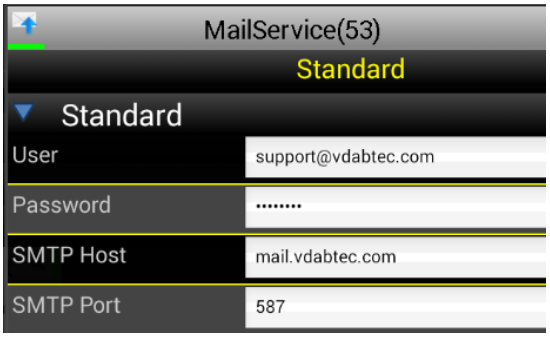


Add an Email Service to the alert handler.

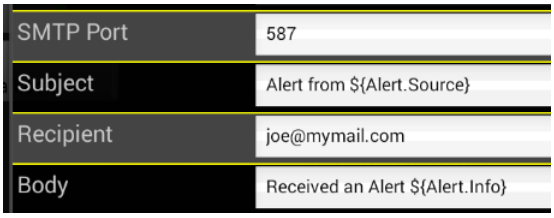
While any node can be added to respond to the event from the *AlertInputStream*, a typical alerting approach would be to send a text or email.

1. Click on the *AlertStreamInput* node and select the option to add a node. Select the *MailService* node.

2. Click on *MailService* node and select the option to edit the node. Set your SMTP server and outgoing email account and password. (See Appendix for node attribute details.)



3. Continue editing setting the subject, recipient and body. As indicated in the node documentation, the body and subject can be templates which will substitute values in the incoming event into those fields. In this case the **`Alert.Source`** will be added to the subject and the **`Alert.Info`** will be detailed in the body of the email. (See Appendix for node attribute details.)



4. Save and Run the flow. If the conditions are met the alert will cause an email to be sent to the recipient. The alert data content will be substituted in the template set for the body and subject of the email

Appendix: Documentation for Nodes

This same information is available for all nodes by going to your local vdab web server at http://localhost/vdab/docs_node.

PingSource	Beta
Ping allows you to check access to a remote system. It also can check the access time for other standard protocols including HTTP, POP3, etc. -1 is returned if it is not accesible	
Service	Enter the service type that will be checked for access. The standard port will be set but can be overridden.
Port	Enter the port number for the service
Address	Enter the domain or ip for the system that will be pinged
PollRate	The frequency that data is sampled in seconds
Comments	Additional comments about this node, flow or container.

Compare	Beta
Returns an event if the numeric comparison is true. Can return the actual number, a boolean or a trigger.	
SelectedElement	Select the data element that should be operated on in this node
Comparator	The type of numeric comparison to make.
CompareValue	The numeric value to compared to the incoming numeric data.
OutputType	The type of output that will published by this node. Supported types include Complete Events,Triggers and a Boolean value
Comments	Additional comments about this node, flow or container.

AlertTarget	Beta
Creates an alert with the selected category and information. Optionally an alert intervention can be started. If AlertLink is set, includes a link to the alert in the resulting info.	
AlertSource	Label for the source of the Alert. Useful when identifying similar alerts from different locations.
AlertCategory	The general category for the alert. The category picked from the Popup can be later used for filtering Alerts for special handling.
AlertSeverity	Severity for the Alert. This value can be used later for selectively handling more severe Alerts.
StartIntervention	If set an intervention will be started to handle this Alert.
AlertInfo	Text can be added to describe the alert.
IncludeEvent	Includes event data in the alert information.
SelectedElement	Select the specific event data to include in the alert information.
IncludeLink	If set a link will be included in the Alert Info which can be used to go to the originating flow or intervention.
SuppressTime	Enter the number of seconds before a second alert can be sent. This avoids generating too many alerts for the same orginating conditions.
EventPropogationLevel	Defines whether or not the alert shoud be set to parent containers. Set to LAKE to send this event to the parent. Set to NONE or STREAM to handle the alert locally.
Comments	Additional comments about this node, flow or container.

AlertStreamInput

Beta

Listens to the alert stream coming into the container from this container and its children. Allows selection by container.

Container	Selects for alerts from a specific container. If none is selected, alerts from all containers are processed.
AlertCategory	Selects the category of alerts to process. Leave blank to process all categories of alerts.
Match	Filters alerts by looking for this text and only processing those alerts containing this text.
OutputType	The type of output that will published by this node. Supported types include Complete Events,Triggers and a Boolean value
Comments	Additional comments about this node, flow or container.

MailService

Beta

Writes an email to selected recipients. The body and subject can templates and include event data.

User	An user email account
Password	The user email account password. Saved passwords will be obfuscated.
SMTPHost	The SMTP Server name.
SMTPPort	The SMTP Server port.
Subject	The subject of the email which can use a template.
Recipient	The recipient for the email.
Body	The body of the email which can use a template
DeliveryReceipt	
AddAttachment	Selected to allow a single file attachment.
Directory	The directory of the file attachment.
Filename	The filename of the file attachment.
OutputType	The type of output that will published by this node. Supported types include Complete Events,Triggers and a Boolean value
Comments	Additional comments about this node, flow or container.